



Billing Code: 7565-01

DEPARTMENT OF THE INTERIOR

National Indian Gaming Commission

25 CFR part 547

RIN 3141-AA27

Technical Standards

AGENCY: National Indian Gaming Commission

ACTION: Proposed rule.

SUMMARY: The National Indian Gaming Commission (NIGC) proposes to amend its technical standards to change the order of the first five sections; add definitions and amend existing definitions; amend the requirements concerning minimum odds for Class II games; amend standards for test labs; remove references to the Federal Communications Commission and Underwriters Laboratory; require a player interface to display a serial number and date of manufacture; amend requirements concerning approval of downloads to a Class II gaming system; establish mandatory tests for random number generators; amend the requirements for scaling algorithms and scaled numbers; and clarify the term “alternate standard.”

DATES: The agency must receive comments on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], 2012.

ADDRESSES: You may submit comments by any one of the following methods, however, please note that comments sent by electronic mail are strongly encouraged.

- Email comments to: reg.review@nigc.gov

- Mail comments to: National Indian Gaming Commission, 1441 L Street NW, Suite 9100, Washington, D.C. 20005.
- Hand deliver comments to: 1441 L Street NW, Suite 9100, Washington, D.C. 20005.
- Fax comments to: National Indian Gaming Commission at 202-632-0045.

FOR FURTHER INFORMATION CONTACT: National Indian Gaming Commission, 1441 L Street NW, Suite 9100 Washington, DC 20005. Telephone: 202-632-7009; email: reg.review@nigc.gov

SUPPLEMENTARY INFORMATION:

I. Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal.

II. Background

The Indian Gaming Regulatory Act (IGRA or Act), Public Law 100-497, 25 U.S.C. 2701 et seq., was signed into law on October 17, 1988. The Act establishes the NIGC and sets out a comprehensive framework for the regulation of gaming on Indian lands. On October 8, 2008, the NIGC published a final rule in the Federal Register called Technical Standards for Electronic, Computer, or Other Technologic Aids Used in the Play of Class II Games. 73 FR 60508. The rule added a new part to the Commission's regulations establishing a process for ensuring the integrity of electronic Class II games and aids. The standards were designed to assist tribal gaming regulatory authorities and operators with ensuring the integrity and security of Class II

gaming, the accountability of Class II gaming revenue, and provide guidance to equipment manufacturers and distributors of Class II gaming systems. The standards do not classify which games are class II and which games are class III.

On November 18, 2010, the NIGC issued a Notice of Inquiry and Notice of Consultation advising the public that the NIGC has endeavored to conduct a comprehensive review of its regulations and requesting public comment on which were most in need of revision, in what order the Commission should review its regulations, and the process NIGC should utilize to make revisions. 75 FR 70680. On April 4, 2011, after consulting with tribes and reviewing all comments, the NIGC published a Notice of Regulatory Review Schedule (NRR) setting out a consultation schedule and process for review. 76 FR 18457. Part 547 was included in the third regulatory group reviewed pursuant to the NRR.

III. Development of the Proposed Rule

On July 8, 2011, the Commission began a series of tribal consultations on part 547. Based in part on the recommendations to the Commission during consultations, on August 10, 2011, the Commission requested tribes to nominate tribal representatives to serve on a Tribal Advisory Committee (TAC) to assist the Commission in drafting changes to parts 543 and these technical standards. The Commission then selected fifteen tribal representatives. The members of the TAC include a diverse group of regulators, tribal leaders, and subject matter experts.

Beginning on October 20, 2011, the TAC held four meetings in which the Commission participated. All of the meetings were open to the public and three of the four were transcribed. Those transcripts can be viewed on the NIGC's website. During the meetings, the TAC and NIGC discussed all aspects of the technical standards, with the NIGC participating and providing assistance. As a result of those meetings the TAC submitted a proposed part 547 regulation to the

Commission.

The Commission appreciates the TAC's deliberation and work product, which consisted of the TAC's proposed part 547. Upon reviewing the TAC's recommendation, and taking into consideration comments received through tribal consultations, the Commission published a discussion draft of the amended technical standards on its website. The discussion draft adopted a number of the TAC's recommendations, such as moving requirements that more appropriately belong to the Minimum Internal Control Standards found at 25 CFR part 543.

After publishing the discussion draft, the Commission conducted consultations in Mayetta, KS and San Diego, CA. In addition to tribal consultations, the Commission requested public comment on the discussion draft. The consultations, combined with the written comments, have proven invaluable to the Commission as it addresses the NIGC's technical standards.

While the comments were generally supportive of the discussion draft, comments indicated several specific areas of concern. After considering the comments received, the Commission proposes the following amendments to the part 547 technical standards.

A. General comments

One commenter requested clarification of the NIGC's authority to implement these standards and its authority to enforce the standards. IGRA gives the Commission the authority to adopt these technical standards. Congress was expressly concerned that gaming under IGRA be "conducted fairly and honestly by both the operator and players" and "to ensure that the Indian tribe is the primary beneficiary of the gaming operation." 25 U.S.C. 2702(2). The technical standards are designed to ensure that these concerns are addressed. These standards implement the authority granted the Commission to monitor, inspect, and examine Class II gaming, 25

U.S.C. 2706(b)(1)-(4), and to promulgate such regulations as it deems appropriate to implement the provisions of IGRA. 25 U.S.C. 2706(b)(10).

Another commenter asked the Commission to make clear that tribal facilities cannot engage in gambling activities that are illegal under state law. The Commission declines to do so. A tribe may engage in Class II gaming on Indian lands within its jurisdiction if the gaming is located within a state that permits such gaming for any purpose, by any person, organization or entity, and the tribe adopts a gaming ordinance approved by the NIGC Chair. 25 U.S.C. 2710(b)(1). So long as a state permits the game of bingo, regardless of the state's definition of the game, an Indian tribe within that state may also play bingo as defined in IGRA. Accordingly, tribes are not bound to state definitions of the game of bingo. If, for example, a state permits paper bingo only, a tribe within that state may play electronic bingo so long as it otherwise meets IGRA's Class II gaming definition. The Commission reiterates that this rule does not classify games for purposes of IGRA. The rule assumes that the games played are Class II games. This rule establishes a process for ensuring the integrity and security of Class II games and an accounting of Class II revenue.

B. Regulation organization

Sections 547.2 through 547.5 of the current regulation have been reorganized for clarity. The *Definitions* section has been moved from § 547.3 to § 547.2. Section 547.3 of the proposed rule has been renamed, *Who is responsible for implementing these standards?*, and incorporates provisions from §§ 547.2 and 547.5 of the current regulation. Section 547.4 of the proposed rule is titled *What are the rules of general application for this part?*, and was moved from § 547.5 of the current regulation. Finally, § 547.5 of the proposed rule, *How does a tribal government or TGRA comply with this part?*, was moved from 547.4 of the current regulation. The NIGC

included these changes in the discussion draft and received no comments supporting or opposing these changes.

One commenter, however, asserted that the order of later sections is confusing and recommended that the Commission change the part to the following order: Hardware, Software, System Components, Installation/Downloading, and, finally, Grandfathering. The Commission declines to adopt this suggestion. The Commission believes that the regulation is clear as currently arranged.

A commenter also took issue with the use of the word wager, suggesting that the term purchase or sale be used instead. The Commission declines to adopt this recommendation. The terms sale and purchase do not adequately address Class II games outside of bingo, while wager encompasses all Class II gaming.

C. Definitions

This proposed rule adds definitions to § 547.2 and proposes amendments to a number of existing definitions. Some changes were first proposed in the discussion draft, while others are proposed based on comments received on the discussion draft. The discussion draft suggested adding definitions for Patron and Proprietary Class II System Component. The Commission received no comments on the definition of Patron, which was carried over to this proposed rule. Several commenters, however, urged the Commission to remove the definition of Proprietary Class II System Component on the grounds that the term is not used elsewhere in part 547.

The Commission agrees with the commenters and has removed the definition of Proprietary Class II System Component. The intended purpose of the definition was to distinguish the common back of the house component systems that communicate with all of the

Class II gaming systems, regardless of the manufacturer, from those components that work exclusively with one manufacturer's Class II system. On review of the standards, the Commission has concluded that this definition is not necessary and has led to confusion. Therefore, it is not included in the proposed rule. For the same reasons, the Commission has not included the word proprietary in the definitions of Cashless system and Voucher system.

Several commenters also suggested that the Commission revise the definition of Reflexive software to clarify that the harm with such software is the denial of a prize to which the player is otherwise entitled based on the random outcome of the game. The Commission declines to revise the definition in this way. Although the denial of a prize is one harm associated with reflexive software, the definition of Reflexive software is also concerned with the potential manipulation of the outcome of a game to award a prize.

Commenters also recommended that the Commission amend the definition of Agent to permit the use of computer applications to perform the function(s) of an agent. The proposed rule does not include this proposed amendment. The term "computer applications" is undefined and potentially broad. Any hardware that is under the control of an agent is exempt from the testing requirements of this part, and thus amending the definition of Agent in this manner potentially would exempt hardware that is subject to testing requirements such as financial instrument acceptors, financial instrument dispensers, etc.

In response to other comments, the Commission has added definitions for Advertised top prize, Audit mode, Enroll, and Unenroll. The Commission has also reinserted the definition of Electrostatic discharge and, at the suggestion of one commenter, amended the definition of Electromagnetic interference.

D. Who is responsible for implementing these standards?

As with the discussion draft, § 547.3 of the proposed rule has been renamed and incorporates provisions that were previously located in other sections.

Several commenters advocate changing § 547.3(a) to reflect that TGRAs are the primary regulators of Indian Gaming. The comments stated that the current language recognizing that TGRAs “also regulate Class II gaming” is inconsistent with IGRA and NIGC statements. As support, the commenters point to 25 U.S.C. 2701(5), which states that “Indian tribes have the exclusive right to regulate gaming activity on Indian lands....” The commenters also note that the NIGC has repeatedly recognized that tribes are the primary regulators of Indian gaming in the preamble to the current regulation.

The commenters are correct that tribes are the primary regulators of Indian gaming. The Commission has never understood that to mean, however, that the regulatory authority of a TGRA is superior to that of the NIGC. Rather, the Commission recognizes that TGRAs are the day-to-day regulators of Indian gaming and the first line of oversight at every facility. Although the findings section of IGRA states that tribes have the exclusive right to regulate gaming activity on Indian lands, IGRA also establishes a regulatory scheme that includes the NIGC as well as tribes.

Another commenter suggested adding a provision that “nothing in this part is intended to diminish TGRA authority.” The Commission did not adopt this recommendation. The Commission believes that the standards clearly state that a TGRA is free to implement stricter standards than those found in this part. It may not, however, implement standards that are less stringent than those found here.

Many commenters expressed confusion over § 547.3(c). This section makes clear that, if a provision of part 547 is applicable to a facility’s Class II gaming system, the Class II gaming

system must comply with that provision. Inversely, a Class II gaming system does not need to meet standards that do not apply to the system. The first sentence of the sub-section states that “gaming equipment and software used with Class II gaming systems must meet all applicable requirements of this part.” As an example, the second sentence clarifies that if a Class II gaming system lacks the ability to print or accept vouchers, any standards governing vouchers do not apply. Commenters noted that this provision is clear when the two sentences are read together, but confusing when read separately.

The Commission believes that the provision is understandable as written and informs the public that this provision, as well as the rest of the regulation, must be read as a whole, rather than piecemeal. As the comments mentioned, when read in context, the provision is understandable. The proposed rule, therefore, does not include this recommended change.

Another commenter asked that the Commission amend the regulation to clarify that these standards do or do not apply to various specific types of games. The Commission declines to do so, as it believes that § 547.3(c) makes clear that the regulated community need only adhere to those standards that apply to a Class II gaming system.

E. Minimum odds

The discussion draft amended the minimum odds requirement found in § 547.5(c) of the current regulation. Instead of requiring minimum odds, the discussion draft, at § 547.16, required the system display a disclaimer notifying the patron if the odds of winning a game exceed 100 million to one.

Several commenters supported the discussion draft's approach of removing the minimum odds requirement, but were unanimous in recommending against requiring the odds notification

added to § 547.16. Some commenters stated that the provision is unnecessary, as the standards already require the facility to display game rules and prize schedules. Others objected to the requirement on the grounds that it will create an unfair market advantage for games that do not need to display the notice. Another commenter suggested that the odds notification requirement will make all existing Class II gaming systems non-compliant because no existing player interface conforms to this requirement. One commenter submitted that the notice serves no purpose because it does not actually inform the patron of anything. Another commenter, though in opposition to the requirement generally, recommended that the disclaimer be moved to the help screen.

The proposed rule includes a modified version of the notification requirement. The notification need not be continually displayed and may, for example, be included on the help screen or with the rules and prize schedule for the game. The Commission included the requirement primarily out of fairness to the player. Although one commenter suggested that the notification does not actually tell the player anything, the Commission disagrees. The notification informs the player that the odds of winning a top prize exceed 100 million to one. The Commission rejects the argument that requiring the odds notification will render all Class II gaming systems non-compliant. Currently, no Class II game is permitted to have odds greater than 100 million to 1. Therefore, that provision should not apply to any Class II games in the marketplace currently.

Finally, § 547.4 of the proposed rule requires the test lab certifying the game to calculate and/or verify mathematical expectations and report its calculations to the TGRA. At the request of the TGRA, the manufacturer must also submit mathematical expectations to TGRA. This requirement was part of the discussion draft, and the comments received support its inclusion.

F. Approval and game function

Section 547.4(b) of the proposed rule requires that all gaming equipment and software operated at a facility be identical to that tested by a test lab and approved by the TGRA. Some commenters recommended removing the requirement that “unapproved software must not be loaded onto or stored on any program storage medium used in a class II gaming system...” The commenters suggested that this provision is a control standard better located in the Class II Minimum Internal Control Standards found at 25 CFR part 543. The Commission agrees and has moved the requirement from the proposed technical standards, and has included it in proposed amendments to part 543.

Commenters also suggested the Commission review § 547.4(c). The section requires that all Class II gaming systems perform according to the manufacturer’s design and operating specifications. The commenter noted that the provision is odd, as there is no requirement that a manufacturer submit this information to the TGRA or test lab.

The Commission declines to remove the requirement. The Commission realizes that no other section of these standards requires a manufacturer to submit the operating and design specifications. However, the purpose of the section is to affirm the TGRA’s authority to ensure that the Class II gaming system operates as the manufacturer represents. This provision provides an additional basis for a TGRA to require this information.

G. Grandfathered Games

When implemented in 2008, the part 547 technical standards introduced several new requirements for Class II gaming systems designed to protect the security and integrity of Class II gaming systems and tribal operations. The Commission understood, however, that some

existing Class II gaming systems might not meet all of the requirements of the technical standards. Therefore, to avoid any potentially significant economic and practical consequences of requiring immediate compliance, the Commission implemented a five-year “grandfather period” for eligible gaming systems. The Commission believed that a five year period was sufficient for market forces to move equipment toward compliance with the standards.

To qualify as a grandfathered game pursuant to the current regulations, a gaming system must have been submitted to a testing laboratory within 120 days of November 10, 2008. The testing laboratory must have then reviewed the gaming system for compliance with a specific, minimum set of requirements, and have issued a report to the applicable TGRA, which must have then approved the gaming system for grandfather status. At the end of the five year period – November 10, 2013 – the grandfathered systems must be brought in to compliance with the requirements of Part 547 or removed from play.

The Commission received several comments on the grandfathering provisions, the majority of which focused on the five year duration. Many comments suggested that the Commission remove the five year clause, effectively creating a permanent class of grandfathered games. Comments reasoned that making no amendments to the current regulation would cause economic hardship to some tribes, although the Commission received no specific information indicating what, if any, economic hardship tribes would incur.

This proposed rule does not include any substantive changes to the grandfathering provisions because the comments received by the Commission on the preliminary draft did not provide facts to support any change to this section. The Commission invites comment that provides data and the factual basis supporting the views and suggestions regarding the grandfathering provisions. For example, the Commission requests specific information on what

provisions in part 547, if any, prevent compliance for current grandfathered Class II gaming systems, and why? Such information is particularly helpful in developing reasoned regulatory decisions.

Although the proposed rule does not include any substantive changes to the grandfathering provisions, the Commission is considering whether substantive amendments are appropriate. Based on information received during this comment period, the Commission may issue a final rule that amends all or parts of the grandfathering provisions as described below. Therefore, the Commission requests the public to provide specific facts and information relating to the following potential changes to the provision, views on which approach will best maintain the integrity of Indian gaming, and, specifically, answers to the questions below:

Duration of the “sunset clause.” The Commission is considering amending the duration of the grandfather provision in § 547.4(b)(1) by extending the period for an additional three to five years or removing the period. In order to make a well-informed, considered decision, the Commission requests the public to provide responses to the following questions:

1. How many Class II gaming systems will be affected if the current date of November 10, 2013 is extended or eliminated?
2. What would be the regulatory and other impacts of extending the period by three to five years past November 10, 2013?

The 120-day deadline to submit to a testing lab. The Commission is considering amending the 120-day submission period in § 547.4(a)(1) by allowing a limited submission period for those systems that did not meet the original 120-day deadline for submission of the gaming system to the lab.

1. How many Class II gaming systems could be potentially submitted to labs if the 120-day period is modified?
2. What would be the regulatory and other impacts of allowing a limited submission period for those systems that did not meet the original deadline?

Modifications. The Commission is considering amending the section by eliminating the five year period in § 547.4(b)(1) and instead requiring that all future repairs, replacements, and modifications to current grandfathered Class II gaming systems be fully compliant with the standards established in part 547.

1. If part 547 were amended in this fashion to apply only to all modifications, what specific impacts would the amendment have on tribal gaming operations?
2. If part 547 were amended in this fashion to apply to all repairs, replacements and modifications to grandfathered Class II gaming systems, what specific impacts would the amendment have on tribal gaming operations?

Comments also suggested that placing a sunset period on grandfathered systems would invalidate federal court decisions sanctioning the games. The commenters have not cited to any particular cases in support of this comment and, as a result, the Commission cannot directly address any decisions or arguments alluded to in the comments. However, the Commission notes that this provision does not bear on the classification of a game as Class II or Class III. The provision requires only that, for any Class II game to be available for play, the game must have been certified as a grandfathered Class II gaming system or comply with the standards in part 547, and that systems must comply with all standards in Part 547 by November 10, 2013.

In addition, comments stated that protection of grandfathered systems is necessary as part

of compact negotiations. The Commission understands that Class II games are an important component of Indian gaming. However, part 547 is designed to protect the security and integrity of Class II gaming.

Commenters also expressed concern over the discussion draft's inclusion of the phrase, "available for use at any tribal gaming facility" in § 547.5(a). Commenters read the provision to require that a grandfathered system must have been available for use on or before November 10, 2008. This interpretation was not intended by the Commission. The section was meant to convey that before any Class II gaming system manufactured prior to November 10, 2008, may be made available for use, it must meet the grandfathering requirements. The Commission has amended the provision accordingly.

In response to this comment, the Commission also revisited the section's requirement that the Class II gaming system must have been manufactured *or* placed in a tribal gaming facility before November 10, 2008. The Commission realizes that the application of the requirement to systems that were *manufactured* prior to November 10, 2008 will necessarily include those games that were placed in a tribal facility, and has thus changed the section.

Other comments noted that the discussion draft's grandfathering provision creates a catch-22 by requiring software systems to have been submitted for certification based on new standards contained in this draft. The Commission recognizes that the discussion draft's requirement that grandfathered systems have the ability to enable or disable remote access created a new standard and, as a result, may disqualify a previously properly certified grandfathered system. The provision has, accordingly, not been included in the proposed rule. Under this proposed rule, any game that was certified as grandfathered based on the requirements in the current 547 remains certified.

This change also resolves comments recommending that the Commission insert language clarifying that nothing in the rule is intended to prohibit the continued use of any Class II gaming component that was previously certified against the grandfather provisions or judicial ruling. If a component was grandfathered, it may be used pursuant to the grandfathering provisions found in this proposed rule. The Commission, therefore, declines to include the recommended language.

Further, comments have suggested that a requirement that a test lab certify compliance with “any applicable federal laws and regulations” is too inclusive. According to the commenters, it would not be feasible for a testing laboratory to review all federal laws and regulations to determine which ones are applicable.

The Commission agrees with the comment, and believes that a TGRA is in the best position to ensure compliance with federal regulations that apply to its gaming systems. As a result, the proposed rule includes a provision to require a test lab to note compliance with any standard established by the TGRA. The Commission encourages TGRAs to use this provision to ensure compliance with federal standards that apply to their Class II game systems, but fall outside of the NIGC’s purview.

Other commenters have expressed concern that a rule incorporating the discussion draft’s provisions will require re-certification of otherwise compliant systems. Because the proposed rule does not make any substantive changes to the grandfather provisions, any system compliant with the existing part 547 will also meet the standards outlined in this proposed rule.

H. Testing Laboratories

Section 547.5(f) of the discussion draft permitted a testing laboratory to provide the testing and certification required by the standards even if owned by, or affiliated with, a tribe, so

long as it is independent from the manufacturer and gaming operator for whom it is providing testing. Comments on this change were overwhelmingly supportive. One commenter, though, suggested that this change creates the perceived risk of a conflict of interest and recommended no amendment to this section.

The proposed rule includes the amendment. The Commission believes that any perceived risk is mitigated by the section's requirement that the tribally-owned or affiliated test laboratory be independent from the manufacturer and gaming operator for whom it is providing testing.

The discussion draft also amended § 547.7 of the current regulation requiring certifications from Underwriter's Laboratory (UL) or its equivalent regarding liquid spills, electromagnetic interference, etc. The discussion draft added a provision at § 547.5(c)(4) requiring a testing laboratory's report to certify that the operation of each interface will not be affected by electrostatic discharge, liquid spills, electromagnetic interference, radio frequency interference, or any other risk identified by the TGRA.

Comments regarding this change were generally positive. In expressing support for the removal of the UL reference, a few commenters noted that the establishment and enforcement of electrical product safety standards falls within the authority of tribal governments. Another comment claimed that the NIGC is not authorized to establish or enforce electrical safety standards and questioned the propriety of an agency specifying a particular laboratory to conduct such testing.

The Commission appreciates support for the removal of the reference to UL and has kept the new language, with few changes, in this proposed rule. The Commission notes, however, that the provision still requires player interfaces to be tested to ensure that they will not be compromised or affected by listed events and conditions. Rather than requiring that the test lab

itself perform the test and certify the Class II gaming system, the proposed rule instead requires the test lab to confirm that the system has been certified.

Another commenter submitted that it is not clear that a testing laboratory can “certify” that the player interface will not be compromised by “any other risk identified by the TGRA.” The NIGC agrees and the amendment proposes that the test laboratory must confirm that each player interface was certified pursuant to any other tests required by the TGRA.

I. Player interface

Section 547.7(d) of the discussion draft added a requirement that the player interface display the serial number and date of manufacture. Several commenters suggested that use of the word “display” is confusing and the provision should be changed to require the player interface to “bear” the serial number and date of manufacture. The Commission agrees that, when used in the context of a Class II gaming system, the word “display” could be understood to require the game screen to show the information, rather than merely to require the information to be located somewhere on the player interface. Therefore, the Commission has changed § 547.7(d) to require that the player interface “must be labeled with the serial number and date of manufacture” The Commission also notes that this change will be consistent with § 547.5(b)(6) of this proposed rule.

Another commenter urged the Commission to add a provision to § 547.7(k) specifying that “nothing herein must prohibit or limit the technology utilized to run Class II gaming systems.” The Commission believes that § 547.3(b) already makes this intent clear and, as such, declines to incorporate this comment.

J. Game initiation and play

Section 547.8(b) of the discussion draft requires a Class II gaming system follow and not deviate from a constant set of rules for each game. The provision also prohibits any automatic or undisclosed rule changes. Several commenters recommended eliminating the words “automatic or.” The Commission respectfully disagrees. Any rule should be disclosed to the patron prior to initiation of game play, and any rule change to the game must be disclosed to the patron. This section, combined with § 547.16(a), ensures that the constancy of game rules for all game features, including any bonus features.

Comments suggested that the requirement in § 547.8(b) that a player “choose to participate in the play of a game,” is vague, not a technical standard, and cannot be tested. The Commission agrees that this provision is not clear. The intent is to require that the player initiates game play. To clarify, the Commission changed the provision to read, “[n]o game play may commence unless initiated by a player.”

K. Entertaining display

Section 547.8 of the current technical standards contains certain requirements regarding the entertaining displays. Section 547.8(a)(2)(ii) requires that, between plays of any game, or until a new game option is selected, the player interface must display the final results for the last game, including the entertaining display. Section 547.8(d)(2), meanwhile, requires entertaining display be included in the last game recall.

The discussion draft removed references to entertaining displays from both of these sections. Nearly all of the comments expressed support for the change. Comments focused on the fact that the entertaining display has no significance to the outcome of the game. A few commenters, however, opposed this change.

One commenter suggested that the revision to 547.8(a)(2)(ii) would require the game display to “go blank” in between games. The Commission respectfully disagrees. The standard, as proposed, does not require a blank screen. It still requires the player interface to display the wager amount and all prizes and total credits won during the last game played, the final results of the last game played, and any default purchase or wager amount for the next play.

Some commenters also objected to the discussion draft no longer requiring last game recall to include the entertaining display. The commenter noted that when a pay-table on a player interface indicates that certain combinations of symbols will result in certain prizes, a player has a reasonable right to expect a prize if that combination of symbols appears on the pay line of the “entertainment only” display. The commenter asserts that if a game posts a prize schedule corresponding to the entertaining display instead of, or in addition to, the bingo card, and a prize paying combination of symbols appears in the entertaining display but no prizes are awarded, the integrity of the gaming system and reputation of the tribe may be called into question.

The Commission agrees that the reputation of an operation is of utmost importance and can reach beyond a particular facility to bolster or harm the reputation of Indian gaming. However, the Commission respectfully disagrees. The game of bingo is dictated by the ball draw and the bingo card, not the entertaining display. This is made clear by the disclaimer required by § 547.16 clarifying that actual prizes are determined by bingo play not the entertaining display. For the technical standards to require last game recall to include the entertaining display would incorrectly emphasize an aspect of the game that has no bearing on its outcome.

The Commission also disagrees with the commenter’s assessment that if the entertaining display indicates a win, the patron should be paid regardless of the bingo results. Prizes should only be awarded on Class II electronic bingo games if the patron has won according to the bingo

card.

L. Game interruption and resumption

The current technical standards and the discussion draft require that if a Class II gaming system is interrupted, it can, upon resumption, return to a known state; check for any fault condition; verify the integrity of data stored in critical memory; return the purchase or wager amount to the player in accordance with the rules of the game; and detect any change or corruption in the Class II gaming system software.

One commenter stated that many of the requirements cannot be accomplished by Class II gaming systems. The Commission disagrees. Class II gaming systems can meet this standard. Further, the Commission notes that this has been a requirement since the current regulation went into effect in 2008 and all Class II gaming systems, with the exception of grandfathered systems, should already meet this requirement.

M. Accounting functions

Section 547.9 of the discussion draft requires the Class II gaming system be capable of tracking minimum accounting data. As part of this requirement, each type of financial instrument accepted and paid by the Class II gaming system must be tracked according to applicable Commission and TGRA regulations governing minimum internal control standards. Some commenters pointed out that the TGRA requirements will necessarily include the Commission's minimum internal control standards and, as such, the references to the Commission should be deleted. The Commission agrees and has changed the section accordingly.

N. Critical events

Section 547.10 of the current regulation and the discussion draft lists several types of fault events that must be recorded by the Class II gaming system. One commenter suggests that “financial storage component full” notification cannot be reported unless an operation is using “smart cans” with the Class II gaming system. The commenter recommends the standard be deleted, as requiring compliance would be costly and there is no risk associated with a can being full.

The Commission declines to adopt this recommendation. The Commission notes that this has been a requirement since the current technical standards went into effect in 2008, and all Class II gaming systems, with the exception of grandfathered systems, should already meet this standard.

O. Download approval

This proposed rule removes the requirement from § 547.12 that the TGRA authorize all downloads by a Class II gaming system. This change was first made in the discussion draft and many commenters requested clarification that nothing prohibits the TGRA from maintaining the download approval requirement. As stated in 547.3(a), the Commission recognizes that the TGRA regulates technical standards and, accordingly, may implement stricter standards. Nothing in this section prohibits the TGRA from requiring its approval of downloads.

P. Scaling algorithm

Section 547.14 of the current regulation requires that a random number generator (RNG) that provides output scaled to given ranges must use an unbiased algorithm. According to the regulation, a scaling algorithm is unbiased if the measured bias is no greater than 1 in 100 million. The discussion draft changed this requirement to require the RNG to use an unbiased

algorithm and report any bias to the TGRA. The proposed rule includes this amendment. A few commenters propose re-inserting a range for measured bias on the grounds that requiring any bias to be reported could be an unworkable standard, but do not explain why the proposed standard is unworkable.

The Commission also notes that the measured bias of 1 in 100 million proved unworkable and required the Commission to issue bulletin number 2008-4 clarifying that the threshold for reporting a bias should instead be 1 in 50 million. The Commission, therefore, declines to implement the suggested comment in this proposed rule and asks commenters to be more specific as to why the requirement to report any bias is unworkable. The Commission further asks for comments on what would be a workable threshold.

Q. Disclaimers

Section 547.16(b) of the current regulation requires the Class II gaming system to continuously display two disclaimers – first, that malfunctions void all prizes and plays and the prizes are determined by bingo play and second, that any other display is for entertainment purposes only. Although the discussion draft maintained this requirement, the proposed rule now requires the “player interface,” rather than the “Class II gaming system” to display the disclaimers.

A few commenters suggested that the Commission should clarify that this change is not intended to require that the disclaimers be displayed on the video screen. The Commission agrees. The standard requires only that the player interface, which is defined by this part, display the disclaimer, not any specific part of the interface. So long as the disclaimer is located in a place that can be clearly seen by the public, as this standard clearly intends, it can be located anywhere the interface that the TGRA allows.

Another commenter suggests that the “continually display” requirement presents a hardship, as it takes up space on smaller devices such as bingo minders. The commenter also notes that the requirement will become wholly unworkable as technology advances to the point where participants are able to use their own technology, such as a cell phone, in the play of the game.

The Commission declines to incorporate this suggestion into the proposed rule. As recognized by recommended drafts submitted to the NIGC, including that presented by the TAC, the disclaimers are of critical importance, and, therefore, the Commission believes that it is necessary that they be displayed somewhere on the player interface at all times.

R. Alternate Standards

Finally, the discussion draft made minor changes to § 547.17. Although the overall purpose of the section is the same, the discussion draft uses the term “alternate standard” rather than “variance.” The Commission believes that “alternate standard” more accurately reflects the activity covered by the standard. The change is also consistent with the proposed part 543 minimum internal control standards, which also uses “alternate standard” rather than “variance.”

Although commenters were unanimously supportive of the change, a few asked that the standard be changed to clarify that the TGRA can implement the alternate standard as soon as it is approved by the TGRA. Section 547.17(b)(4) of the discussion draft and this proposed rule prohibit an alternate standard from being implemented until “it has been approved by the TGRA . . . or the Chair” The Commission believes that this language makes clear that an alternate standard may be implemented upon TGRA approval and declines to change the section further.

Another commenter suggested clarifying the § 547.17(a)(2)(ii) requirement that a TGRA submit to the Chair, “the alternate standard as granted and the record on which it is based.” The Commission intended this section to require the record upon which the approval is based and has changed the language accordingly.

One commenter also suggested finding a compromise between a standard that allows a TGRA to submit an approved standard for NIGC comment, and the discussion draft standard, which required the alternate standard be submitted for NIGC approval.

Although TGRAs have the authority to implement stricter standards, these are NIGC’s minimum standards. Any alternate standard, therefore, must be approved by the NIGC. A TGRA may still approve a standard in its TICS that is, at a minimum, as strict as these standards.

Regulatory Matters

Regulatory Flexibility Act

The proposed rule will not have a significant impact on a substantial number of small entities as defined under the Regulatory Flexibility Act, 5 U.S.C. 601, *et seq.* Moreover, Indian Tribes are not considered to be small entities for the purposes of the Regulatory Flexibility Act.

Small Business Regulatory Enforcement Fairness Act

The proposed rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. The rule does not have an effect on the economy of \$100 million or more. The rule will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, local government agencies or geographic regions. Nor will the proposed rule have a significant adverse effect on competition, employment, investment,

productivity, innovation, or the ability of the enterprises, to compete with foreign based enterprises.

Unfunded Mandate Reform Act

The Commission, as an independent regulatory agency, is exempt from compliance with the Unfunded Mandates Reform Act, 2 U.S.C. 1502(1); 2 U.S.C. 658(1).

Takings

In accordance with Executive Order 12630, the Commission has determined that the proposed rule does not have significant takings implications. A takings implication assessment is not required.

Civil Justice Reform

In accordance with Executive Order 12988, the Commission has determined that the proposed rule does not unduly burden the judicial system and meets the requirements of § 3(a) and 3(b)(2) of the Order.

National Environmental Policy Act

The Commission has determined that the proposed rule does not constitute a major federal action significantly affecting the quality of the human environment and that no detailed statement is required pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4321, *et seq.*

Paperwork Reduction Act

The information collection requirements contained in this rule were previously approved by the Office of Management and Budget (OMB) as required by 44 U.S.C. 3501 *et seq.* and

assigned OMB Control Number 3141-0007, which expired in August of 2011. The NIGC is in the process of reinstating that Control Number.

Authority: 25 U.S.C. 2706(b).

Text of the Proposed Rule

PART 547 – MINIMUM TECHNICAL STANDARDS FOR GAMING EQUIPMENT USED WITH THE PLAY OF CLASS II GAMES

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Authority: 25 U.S.C. 2706(b).

§ 547.1 What is the purpose of this part?

The Indian Gaming Regulatory Act, 25 U.S.C. 2703(7)(A)(i), permits the use of electronic, computer, or other technologic aids in connection with the play of Class II games. This part establishes the minimum technical standards governing the use of such aids.

§ 547.2 What are the definitions for this part?

For the purposes of this part, the following definitions apply:

Account access component. A component within a Class II gaming system that reads or recognizes account access media and gives a patron the ability to interact with an account.

Account access medium. A magnetic stripe card or any other medium inserted into, or otherwise made to interact with, an account access component in order to give a patron the ability to interact with an account.

Advertised top prize. The highest single prize available based on information contained in the prize schedule.

Agent. A person authorized by the gaming operation, as approved by the TGRA, to make decisions or perform tasks or actions on the behalf of the gaming operation.

Audit mode. The mode where it is possible to view Class II gaming system accounting functions, statistics, etc. and perform non-player-related functions.

Cancel credit. An action initiated by the Class II gaming system where some or all of a player's credits are removed by an attendant and paid to the player.

Cashless system. A system that performs cashless transactions and maintains records of those cashless transactions.

Cashless transaction. A movement of funds electronically from one component to another.

CD-ROM. Compact Disc – Read Only Memory. *Chair.* The Chair of the National Indian Gaming Commission.

Class II gaming. Class II gaming has the same meaning as defined in 25 U.S.C. 2703(7)(A).

Class II gaming system. All components, whether or not technologic aids in electronic, computer, mechanical, or other technologic form, that function together to aid the play of one or more Class II games, including accounting functions mandated by these regulations.

Commission. The National Indian Gaming Commission established by the Indian Gaming Regulatory Act, 25 U.S.C. 2701 *et seq.*

Coupon. A financial instrument of fixed wagering value, usually paper, that can only be used to acquire non-cashable credits through interaction with a voucher system. This does not include instruments such as printed advertising material that cannot be validated directly by a voucher system.

Critical memory. Memory locations storing data essential to the functionality of the Class II gaming system.

DLL. A Dynamic-Link Library file.

Download package. Approved data sent to a component of a Class II gaming system for such purposes as changing the component software.

DVD. Digital Video Disk or Digital Versatile Disk.

Enroll. The process by which a class II gaming system identifies and establishes communications with an additional system component to allow for live gaming activity to take place on that component

EPROM. Erasable Programmable Read Only Memory – a non-volatile storage chip or device that may be filled with data and information, that once written is not modifiable, and that is retained even if there is no power applied to the system.

Electromagnetic interference. The disruption of operation of an electronic device when it is in the vicinity of an electromagnetic field in the radio frequency spectrum that is caused by another electronic device.

Electrostatic discharge. A single event, rapid transfer of electrostatic charge between two objects, usually resulting when two objects at different potentials come into direct contact with each other.

Fault. An event that when detected by a Class II gaming system causes a discontinuance of game play or other component functions.

Financial instrument. Any tangible item of value tendered in Class II game play, including, but not limited to, bills, coins, vouchers and coupons.

Financial instrument acceptor. Any component that accepts financial instruments, such as a bill validator.

Financial instrument dispenser. Any component that dispenses financial instruments, such as a ticket printer.

Financial instrument storage component. Any component that stores financial instruments, such as a drop box.

Flash memory. Non-volatile memory that retains its data when the power is turned off and that can be electronically erased and reprogrammed without being removed from the circuit board.

Game software. The operational program or programs that govern the play, display of results, and/or awarding of prizes or credits for Class II games.

Gaming equipment. All electronic, electro-mechanical, mechanical, or other physical components utilized in the play of Class II games.

Hardware. Gaming equipment.

Interruption. Any form of mis-operation, component failure, or interference to the Class II gaming equipment.

Modification. A revision to any hardware or software used in a Class II gaming system.

Non-cashable credit. Credits given by an operator to a patron; placed on a Class II gaming system through a coupon, cashless transaction or other approved means; and capable of activating play but not being converted to cash.

Patron. A person who is a customer or guest of the gaming operation and may interact with a Class II game. Also may be referred to as a “player”.

Patron deposit account. An account maintained on behalf of a patron, for the purpose of depositing and withdrawing cashable funds for the primary purpose of interacting with a gaming activity.

Player interface. Any component or components of a Class II gaming system, including an electronic or technologic aid (not limited to terminals, player stations, handhelds, fixed units, etc.), that directly enables player interaction in a Class II game.

Prize schedule. The set of prizes available to players for achieving pre-designated patterns in the Class II game.

Program storage media. An electronic data storage component, such as a CD-ROM, EPROM, hard disk, or flash memory on which software is stored and from which software is read.

Progressive prize. A prize that increases by a selectable or predefined amount based on play of a Class II game.

Random number generator (RNG). A software module, hardware component or combination of these designed to produce outputs that are effectively random.

Reflexive software. Any software that has the ability to manipulate and/or replace a randomly generated outcome for the purpose of changing the results of a Class II game.

Removable/rewritable storage media. Program or data storage components that can be removed from gaming equipment and be written to, or rewritten by, the gaming equipment or by other equipment designed for that purpose.

Server. A computer that controls one or more applications or environments within a Class II gaming system.

Test/diagnostics mode. A mode on a component that allows various tests to be performed on the Class II gaming system hardware and software.

Testing laboratory. An organization recognized by a TGRA pursuant to § 547.5(f).

TGRA. Tribal gaming regulatory authority, which is the entity authorized by tribal law to regulate gaming conducted pursuant to the Indian Gaming Regulatory Act.

Unenroll. The process by which a class II gaming system disconnects an enrolled system component, disallowing any live gaming activity to take place on that component

Voucher. A financial instrument of fixed wagering value, usually paper, that can only be used to acquire an equivalent value of cashable credits or cash through interaction with a voucher system.

Voucher system. A component of the Class II gaming system that securely maintains records of vouchers and coupons; validates payment of vouchers; records successful or failed payments of vouchers and coupons; and controls the purging of expired vouchers and coupons.

§ 547.3 Who is responsible for implementing these standards?

(a) Minimum Standards. These are minimum standards and a TGRA may establish and implement additional technical standards that do not conflict with the standards set out in this part.

(b) No Limitation of Technology. This part should not be interpreted to limit the use of technology or to preclude the use of technology not specifically referenced.

(c) Only applicable standards apply. Class II gaming system equipment and software must meet all applicable requirements of this part. For example, if a Class II gaming system lacks the ability to print or accept vouchers, then any standards that govern vouchers do not apply. These standards do not apply to associated equipment such as voucher and kiosk systems.

(d) State Jurisdiction. Nothing in this part shall be construed to grant to a state jurisdiction over Class II gaming or to extend a state's jurisdiction over Class III gaming.

§ 547.4 What are the rules of general application for this part?

(a) Fairness. No Class II gaming system may cheat or mislead users. All prizes advertised must be available to win during the game. Test laboratory must calculate and/or verify the mathematical expectations of game play, where applicable, in accordance with the manufacturer

stated submission. The results must be included in the test laboratory's report to the TGRA. At the request of the TGRA, the manufacturer must also submit the mathematical expectations of the game play to the TGRA.

(b) Approved equipment and software only. All gaming equipment and software used with Class II gaming systems must be identical in all respects to a prototype reviewed and tested by a testing laboratory and approved for use by the TGRA pursuant to § 547.5(a) through (c).

(c) Proper functioning. All gaming equipment and software used with Class II gaming systems must perform according to the manufacturer's design and operating specifications.

§ 547.5 How does a tribal government, TGRA, or tribal gaming operation comply with this part?

(a) Limited immediate compliance. A tribal gaming regulatory authority shall:

(1) Require that all Class II gaming system software that affects the play of the Class II game be submitted, together with the signature verification required by § 547.8(f), to a testing laboratory recognized pursuant to paragraph (f) of this section within 120 days after November 10, 2008;

(2) Require that the testing laboratory test the submission to the standards established by § 547.8(b), § 547.8(f), § 547.14, and to any additional technical standards adopted by the TGRA;

(3) Require that the testing laboratory provide the TGRA with a formal written report setting forth and certifying to the findings and conclusions of the test;

(4) Make a finding, in the form of a certificate provided to the supplier or manufacturer of the Class II gaming system, that the Class II gaming system qualifies for grandfather status under the provisions of this section, but only upon receipt of a testing laboratory's report that the Class II

gaming system is compliant with § 547.8(b), § 547.8(f), § 547.14, and any other technical standards adopted by the TGRA. If the TGRA does not issue the certificate, or if the testing laboratory finds that the Class II gaming system is not compliant with § 547.8(b), § 547.8(f), § 547.14, or any other technical standards adopted by the TGRA, then the gaming system shall immediately be removed from play and not be utilized.

(5) Retain a copy of any testing laboratory's report so long as the Class II gaming system that is the subject of the report remains available to the public for play;

(6) Retain a copy of any certificate of grandfather status so long as the Class II gaming system that is the subject of the certificate remains available to the public for play; and

(7) Require the supplier of any player interface to designate with a permanently affixed label each player interface with an identifying number and the date of manufacture or a statement that the date of manufacture was on or before November 10, 2008. The tribal gaming regulatory authority shall also require the supplier to provide a written declaration or affidavit affirming that the date of manufacture was on or before November 10, 2008.

(b) Grandfather provisions. All Class II gaming systems manufactured before November 10, 2008, and certified pursuant to paragraph (a) of this section are grandfathered Class II gaming systems for which the following provisions apply:

(1) Grandfathered Class II gaming systems may continue in operation for a period of five years from November 10, 2008.

(2) Grandfathered Class II gaming system shall be available for use at any tribal gaming facility subject to approval by the TGRA, which shall transmit its notice of that approval, identifying the grandfathered Class II gaming system and its components, to the Commission.

(3) As permitted by the TGRA, individual hardware or software components of a grandfathered Class II gaming system may be repaired or replaced to ensure proper functioning, security, or integrity of the grandfathered Class II gaming system.

(4) All modifications that affect the play of a grandfathered Class II gaming system must be approved pursuant to paragraph (c) of this section, except for the following:

(i) Any software modifications that the TGRA finds will maintain or advance the Class II gaming system's overall compliance with this part or any applicable provisions of part 543 of this chapter, after receiving a new testing laboratory report that the modifications are compliant with the standards established by § 547.8(b), § 547.14, and any other standards adopted by the TGRA;

(ii) Any hardware modifications that the TGRA finds will maintain or advance the system's overall compliance with this part or any applicable provisions of part 543 of this chapter; and

(iii) Any other modification to the software of a grandfathered Class II gaming system that the TGRA finds will not detract from, compromise or prejudice:

(A) The proper functioning, security, or integrity of the Class II gaming system, and

(B) The gaming system's overall compliance with the requirements of this part or any applicable provisions of part 543 of this chapter.

(iv) No such modification may be implemented without the approval of the TGRA. The TGRA shall maintain a record of the modification so long as the Class II gaming system that is the subject of the modification remains available to the public for play and shall make the record available to the Commission upon request. The Commission will only make available for public review records or portions of records subject to release under the Freedom of Information Act, 5 U.S.C. 552; the Privacy Act of 1974, 5 U.S.C. 552a; or the Indian Gaming Regulatory Act, 25

U.S.C. 2716(a).

(c) Submission, testing, and approval – generally. Except as provided in paragraphs (b) and (d) of this section, a TGRA may not permit the use of any Class II gaming system, or any associated cashless system or voucher system or any modification thereto, in a tribal gaming operation unless:

(1) The Class II gaming system, cashless system, voucher payment system, or modification thereto has been submitted to a testing laboratory;

(2) The testing laboratory tests the submission to the standards established by:

(i) This part;

(ii) Any applicable provisions of part 543 of this chapter that are testable by the testing laboratory; and

(iii) The TGRA;

(3) The testing laboratory provides a formal written report to the party making the submission, setting forth and certifying to its findings and conclusions, and noting compliance with any standard established by the TGRA pursuant to (c)(2)(iii) of this section;

(4) The testing laboratory's written report confirms that the operation of each player interface has been certified that it will not be compromised or affected by electrostatic discharge, liquid spills, electromagnetic interference, radio frequency interference, or any other tests required by the TGRA;

(5) Following receipt of the testing laboratory's report, the TGRA makes a finding that the Class II gaming system, cashless system, or voucher system conforms to the standards established by:

(A) This part;

(B) Any applicable provisions of part 543 of this chapter that are testable by the testing laboratory; and

(C) The TGRA.

(6) The TGRA must retain a copy of the testing laboratory's report required by paragraph (c) of this section so long as the Class II gaming system, cashless system, voucher system, or modification thereto that is the subject of the report remains available to the public for play in its gaming operation.

(d) Emergency hardware and software modifications.

(1) A TGRA, in its discretion, may permit the modification of previously approved hardware or software to be made available for play without prior laboratory testing or review if the modified hardware or software is:

(i) Necessary to correct a problem affecting the fairness, security, or integrity of a game or accounting system or any cashless system, or voucher system; or

(ii) Unrelated to game play, an accounting system, a cashless system, or a voucher system.

(2) If a TGRA authorizes modified software or hardware to be made available for play or use without prior testing laboratory review, the TGRA must thereafter require the hardware or software manufacturer to:

(i) Immediately advise other users of the same hardware or software of the importance and availability of the update;

(ii) Immediately submit the new or modified hardware or software to a testing laboratory for testing and verification of compliance with this part and any applicable provisions of part 543 of this chapter that are testable by the testing laboratory; and

(iii) Immediately provide the TGRA with a software signature verification tool meeting the requirements of § 547.8(f) for any new or modified software.

(3) If a TGRA authorizes a software or hardware modification under this paragraph, it must maintain a record of the modification and a copy of the testing laboratory report so long as the Class II gaming system that is the subject of the modification remains available to the public for play and must make the record available to the Commission upon request. The Commission will only make available for public review records or portions of records subject to release under the Freedom of Information Act, 5 U.S.C. 552; the Privacy Act of 1974, 5 U.S.C. 552a; or the Indian Gaming Regulatory Act, 25 U.S.C. 2716(a).

(e) Compliance by charitable gaming operations. This part does not apply to charitable gaming operations, provided that:

(1) The tribal government determines that the organization sponsoring the gaming operation is a charitable organization;

(2) All proceeds of the charitable gaming operation are for the benefit of the charitable organization;

(3) The TGRA permits the charitable organization to be exempt from this part;

(4) The charitable gaming operation is operated wholly by the charitable organization's employees or volunteers; and

(5) The annual gross gaming revenue of the charitable gaming operation does not exceed \$1,000,000.

(f) Testing laboratories.

(1) A testing laboratory may provide the examination, testing, evaluating and reporting functions required by this section provided that:

(i) It demonstrates its integrity, independence and financial stability to the TGRA.

(ii) It demonstrates its technical skill and capability to the TGRA.

(iii) If the testing laboratory is owned or operated by, or affiliated with, a tribe, it must be independent from the manufacturer and gaming operator for whom it is providing the testing, evaluating, and reporting functions required by this section.

(iv) The TGRA:

(A) Makes a suitability determination of the testing laboratory based upon standards no less stringent than those set out in §§ 533.6(b)(1)(ii) through (v) of this chapter and based upon no less information than that required by § 537.1 of this chapter, or

(B) Accepts, in its discretion, a determination of suitability for the testing laboratory made by any other gaming regulatory authority in the United States.

(v) After reviewing the suitability determination and the information provided by the testing laboratory, the TGRA determines that the testing laboratory is qualified to test and evaluate Class II gaming systems.

(2) The TGRA must:

(i) Maintain a record of all determinations made pursuant to paragraphs (f)(1)(iii) and (f)(1)(iv) of this section for a minimum of three years and must make the records available to the Commission upon request. The Commission will only make available for public review records or portions of records subject to release under the Freedom of Information Act, 5 U.S.C. § 552; the Privacy Act of 1974, 5 U.S.C. § 552a; or the Indian Gaming Regulatory Act, 25 U.S.C. § 2716(a).

(ii) Place the testing laboratory under a continuing obligation to notify it of any adverse regulatory action in any jurisdiction where the testing laboratory conducts business.

(iii) Require the testing laboratory to provide notice of any material changes to the information provided to the TGRA.

§ 547.6 What are the minimum technical standards for enrolling and enabling Class II gaming system components?

(a) General requirements. Class II gaming systems must provide a method to:

- (1) Enroll and unenroll Class II gaming system components;
- (2) Enable and disable specific Class II gaming system components.

(b) Specific requirements. Class II gaming systems must:

- (1) Ensure that only enrolled and enabled Class II gaming system components participate in gaming; and
- (2) Ensure that the default condition for components must be unenrolled and disabled.

§ 547.7 What are the minimum technical hardware standards applicable to Class II gaming systems?

(a) Printed circuit boards.

(1) Printed circuit boards that have the potential to affect the outcome or integrity of the game, and are specially manufactured or proprietary and not off-the-shelf, must display a unique identifier such as a part number and/or revision number, which must be updated to reflect new revisions or modifications of the board.

(2) Switches or jumpers on all circuit boards that have the potential to affect the outcome or integrity of any game, progressive award, financial instrument, cashless transaction, voucher transaction, or accounting records must be capable of being sealed.

(b) Electrostatic discharge. Class II gaming system components accessible to the public must be constructed so that they exhibit immunity to human body electrostatic discharges on areas exposed to contact. Static discharges of ± 15 kV for air discharges and ± 7.5 kV for contact discharges must not cause damage or inhibit operation or integrity of the Class II gaming system.

(c) Physical enclosures. Physical enclosures must be of a robust construction designed to resist determined illegal entry. All protuberances and attachments such as buttons, identification plates, and labels must be sufficiently robust to avoid unauthorized removal.

(d) Player interface. The player interface must be labeled with the serial number and date of manufacture and include a method or means to:

(1) Display information to a player; and

(2) Allow the player to interact with the Class II gaming system.

(e) Account access components. A Class II gaming system component that reads account access media must be located within a secure and locked area, cabinet, or housing that is of a

robust construction designed to resist determined illegal entry and to protect internal components. In addition, the account access component:

(1) Must be constructed so that physical tampering leaves evidence of such tampering; and

(2) Must provide a method to enable the Class II gaming system to interpret and act upon valid or invalid input or error condition.

(f) Financial instrument storage components. Any Class II gaming system components that store financial instruments and that are not operated under the direct control of a gaming operation employee or agent must be located within a secure and locked area, cabinet, or housing that is of a robust construction designed to resist determined illegal entry and to protect internal components.

(g) Financial instrument acceptors.

(1) Any Class II gaming system components that handle financial instruments and that are not operated under the direct control of an agent must:

(i) Be located within a secure and locked area, cabinet, or housing that is of a robust construction designed to resist determined illegal entry and to protect internal components;

(ii) Be able to detect the entry of valid or invalid financial instruments and to provide a method to enable the Class II gaming system to interpret and act upon valid or invalid input or error condition; and

(iii) Be constructed to permit communication with the Class II gaming system of the accounting information required by § 547.9(a) and by applicable provisions of any Commission and TGRA regulations governing minimum internal control standards.

(2) Prior to completion of a valid financial instrument transaction by the Class II gaming system, no monetary amount related to that instrument may be available for play. For example, credits may not be available for play until currency or coupon inserted into an acceptor is secured in the storage component.

(3) The monetary amount related to all valid financial instrument transactions by the Class II gaming system must be recorded as required by § 547.9(a) and the applicable provisions of any Commission and TGRA regulations governing minimum internal control standards.

(h) Financial instrument dispensers.

(1) Any Class II gaming system components that dispense financial instruments and that are not operated under the direct control of a gaming operation employee or agent must:

(i) Be located within a secure, locked and tamper-evident area or in a locked cabinet or housing that is of a robust construction designed to resist determined illegal entry and to protect internal components;

(ii) Provide a method to enable the Class II gaming system to interpret and act upon valid or invalid input or error condition; and

(iii) Be constructed to permit communication with the Class II gaming system of the accounting information required by § 547.9(a) and by applicable provisions of any Commission and TGRA regulations governing minimum internal control standards.

(2) The monetary amount related to all valid financial instrument transactions by the Class II gaming system must be recorded as required by § 547.9(a), the applicable provisions of part 543 of this chapter, and any TGRA regulations governing minimum internal control standards.

(i) Game Outcome Determination Components. Any Class II gaming system logic components that affect the game outcome and that are not operated under the direct control of a gaming operation employee or agent must be located within a secure, locked and tamper-evident area or in a locked cabinet or housing that is of a robust construction designed to resist determined illegal entry and to protect internal components. DIP switches or jumpers that can affect the integrity of the Class II gaming system must be capable of being sealed by the TGRA.

(j) Door access detection. All components of the Class II gaming system that are locked in order to meet the requirements of this part must include a sensor or other methods to monitor an open door. A door open sensor, and its components or cables, must be secure against attempts to disable them or interfere with their normal mode of operation.

(k) Separation of functions/no limitations on technology. Nothing herein prohibits the account access component, financial instrument storage component, financial instrument acceptor, and financial instrument dispenser from being included within the same component or being separated into individual components.

§ 547.8 What are the minimum technical software standards applicable to Class II gaming systems?

(a) Player interface displays.

(1) If not otherwise provided to the player, the player interface must display the following:

(i) The purchase or wager amount;

(ii) Game results; and

(iii) Any player credit balance.

(2) Between plays of any game and until the start of the next play, or until the player selects a new game option such as purchase or wager amount or card selection, whichever is earlier, if not otherwise provided to the player, the player interface must display:

(i) The total purchase or wager amount and all prizes and total credits won for the last game played;

(ii) The final results for the last game played; and

(iii) Any default purchase or wager amount for the next play.

(b) Game initiation and play.

(1) Each game played on the Class II gaming system must follow and not deviate from a constant set of rules for each game provided to players pursuant to § 547.16. There must be no automatic or undisclosed changes of rules.

(2) The Class II gaming system may not alter or allow to be altered the card permutations used for play of a Class II game unless specifically chosen by the player prior to commitment to participate in the game. No duplicate cards may be sold for any common draw.

(3) No game play may commence and, no financial instrument or credit may be accepted on the affected player interface, in the presence of any fault condition that affects the outcome of the game, open door, or while in test, audit, or lock-up mode.

(4) No game play may commence unless initiated by a player.

(c) Audit Mode.

(1) If an audit mode is provided, the Class II gaming system must provide, for those components actively involved in the audit:

(i) All accounting functions required by § 547.9, by applicable provisions of any Commission regulations governing minimum internal control standards, and by any internal controls adopted by the tribe or TGRA;

(ii) Display player interface identification; and

(iii) Display software version or game identification;

(2) Audit mode must be accessible by a secure method such as an agent PIN, key, or other auditable access control.

(3) Accounting function data must be accessible by an agent at any time, except during a payout, during a handpay, or during play.

(4) The Class II gaming system must disable financial instrument acceptance on the affected player interface while in audit mode, except during financial instrument acceptance testing.

(d) Last game recall. The last game recall function must:

(1) Be retrievable at all times, other than when the recall component is involved in the play of a game, upon the operation of an external key-switch, entry of an audit card, or a similar method;

(2) Display the results of recalled games as originally displayed or in text representation so as to enable the TGRA or operator to clearly identify the sequences and results that occurred;

(3) Allow the Class II gaming system component providing game recall, upon return to normal game play mode, to restore any affected display to the positions, forms and values displayed before access to the game recall information; and

(4) Provide the following information for the current and previous four games played and must display:

- (i) Play start time, end time, and date;
- (ii) The total number of credits at the start of play
- (iii) The purchase or wager amount;
- (iv) The total number of credits at the end of play;
- (v) The total number of credits won as a result of the game recalled, and the value in dollars and cents for progressive prizes, if different;
- (vi) For bingo games and games similar to bingo, also display:
 - (A) The card(s) used by the player;
 - (B) The identifier of the bingo game played;
 - (C) The numbers or other designations drawn, in the order that they were drawn;
 - (D) The numbers or other designations and prize patterns covered on each card;
 - (E) All prizes won by the player, including winning patterns, if any; and
 - (F) The unique identifier of the card on which prizes were won;
- (vii) For pull-tab games only, also display:
 - (A) The result(s) of each pull-tab, displayed in the same pattern as on the tangible pull-tab;
 - (B) All prizes won by the player;
 - (C) The unique identifier of each pull tab; and
 - (D) Any other information necessary to fully reconstruct the current and four previous plays.

(e) Voucher and credit transfer recall. Notwithstanding the requirements of any other section in this part, a Class II gaming system must have the capacity to:

(1) Display the information specified in § 547.11(b)(5)(ii) through (vi) for the last five vouchers or coupons printed and the last five vouchers or coupons accepted; and

(2) Display a complete transaction history for the last five cashless transactions made and the last five cashless transactions accepted.

(f) Software signature verification. The manufacturer or developer of the Class II gaming system must provide to the testing laboratory and to the TGRA an industry-standard methodology, acceptable to the TGRA, for verifying the Class II gaming system game software. By way of illustration, for game software stored on rewritable media, such methodologies include signature algorithms and hashing formulas such as SHA-1.

(g) Test, diagnostic, and demonstration modes. If test, diagnostic, and/or demonstration modes are provided, the Class II gaming system must, for those components actively involved in the test, diagnostic, or demonstration mode:

(1) Clearly indicate when that component is in the test, diagnostic, or demonstration mode;

(2) Not alter financial data on that component other than temporary data;

(3) Only be available after entering a specific mode;

(4) Disable credit acceptance and payment unless credit acceptance or payment is being tested; and

(5) Terminate all mode-specific functions upon exiting a mode.

(h) Multigame. If multiple games are offered for player selection at the player interface, the player interface must:

- (1) Provide a display of available games;
- (2) Provide the means of selecting among them;
- (3) Display the full amount of the player's credit balance;
- (4) Identify the game selected or being played; and
- (5) Not force the play of a game after its selection.

(i) Program interruption and resumption. The Class II gaming system software must be designed so that upon resumption following any interruption, the system:

- (1) Is able to return to a known state;
- (2) Must check for any fault condition;
- (3) Must verify the integrity of data stored in critical memory;
- (4) Must return the purchase or wager amount to the player in accordance with the rules of the game; and
- (5) Must detect any change or corruption in the Class II gaming system software.

(j) Class II gaming system components acting as progressive controllers. This paragraph applies to progressive controllers and components acting as progressive controllers in Class II gaming systems.

(1) Modification of progressive parameters must be conducted in a secure manner approved by the TGRA. Such parameters may include:

- (i) Increment value;
- (ii) Secondary pool increment(s);
- (iii) Reset amount(s);
- (iv) Maximum value(s); and
- (v) Identity of participating player interfaces.

(2) The Class II gaming system component or other progressive controller must provide a means of creating a progressive balancing report for each progressive link it controls. At a minimum, that report must provide balancing of the changes of the progressive amount, including progressive prizes won, for all participating player interfaces versus current progressive amount(s), plus progressive prizes. In addition, the report must account for, and not be made inaccurate by, unusual events such as:

- (i) Class II gaming system critical memory clears;
- (ii) Modification, alteration, or deletion of progressive prizes;
- (iii) Offline equipment; or
- (iv) Multiple site progressive prizes.

(k) Critical memory.

(1) Critical memory may be located anywhere within the Class II gaming system. Critical memory is any memory that maintains any of the following data:

- (i) Accounting data;
- (ii) Current credits;

- (iii) Configuration data;
 - (iv) Last game play recall information required by § 547.8(d);
 - (v) Game play recall information for the current game play, if incomplete;
 - (vi) Software state (the last normal state software was in before interruption);
 - (vii) RNG seed(s), if necessary for maintaining integrity;
 - (viii) Encryption keys, if necessary for maintaining integrity;
 - (ix) Progressive prize parameters and current values;
 - (x) The five most recent financial instruments accepted by type, excluding coins and tokens;
 - (xi) The five most recent financial instruments dispensed by type, excluding coins and tokens; and
 - (xii) The five most recent cashless transactions paid and the five most recent cashless transactions accepted.
- (2) Critical memory must be maintained using a methodology that enables errors to be identified and acted upon. All accounting and recall functions must be verified as necessary to ensure their ongoing integrity.
- (3) The validity of affected data stored in critical memory must be checked after each of the following events:
- (i) Every restart;
 - (ii) Each attendant paid win;
 - (iii) Each sensed door closure; and

(iv) Every reconfiguration, download, or change of prize schedule or denomination requiring operator intervention or action.

(l) Secured access. Class II gaming systems that use a logon or other means of secured access must include a user account lockout after a predetermined number of consecutive failed attempts to access the Class II gaming system.

§ 547.9 What are the minimum technical standards for Class II gaming system accounting functions?

(a) Required accounting data. The following minimum accounting data, however named, must be maintained by the Class II gaming system:

(1) Amount In: The total value of all financial instruments and cashless transactions accepted by the Class II gaming system. Each type of financial instrument accepted by the Class II gaming system must be tracked independently per financial instrument acceptor, and as required by applicable requirements of TGRA regulations that meet or exceed the minimum internal control standards at 25 CFR part 543.

(2) Amount Out: The total value of all financial instruments and cashless transactions paid by the Class II gaming system, plus the total value of attendant pay. Each type of financial instrument paid by the Class II Gaming System must be tracked independently per financial instrument dispenser, and as required by applicable requirements of TGRA regulations that meet or exceed the minimum internal control standards at 25 CFR part 543.

(b) Accounting data storage. If the Class II gaming system electronically maintains accounting data:

(1) Accounting data must be stored with at least eight decimal digits.

(2) Credit balances must have sufficient digits to accommodate the design of the game.

(3) Accounting data displayed to the player may be incremented or decremented using visual effects, but the internal storage of this data must be immediately updated in full.

(4) Accounting data must be updated upon the occurrence of the relevant accounting event.

(5) Modifications to accounting data must be recorded, including the identity of the person(s) making the modifications, and be reportable by the Class II gaming system.

(c) Rollover. Accounting data that rolls over to zero must not corrupt data.

(d) Credit balance display and function.

(1) Any credit balance maintained at the player interface must be prominently displayed at all times except:

(i) In audit, configuration, recall and test modes; or

(ii) Temporarily, during entertaining displays of game results.

(2) Progressive prizes may be added to the player's credit balance provided:

(i) The player credit balance is maintained in dollars and cents;

(ii) The progressive accounting data is incremented in number of credits; or

(iii) The prize in dollars and cents is converted to player credits or transferred to the player's credit balance in a manner that does not mislead the player or cause accounting imbalances.

(3) If the player credit balance displays in credits, but the actual balance includes fractional credits, the Class II gaming system must display the fractional credit when the player credit balance drops below one credit.

§ 547.10 What are the minimum standards for Class II gaming system critical events?

(a) Fault events.

(1) The following are fault events that must be capable of being recorded by the Class II gaming system:

Event	Definition and action to be taken
(i) Component fault	Reported when a fault on a component is detected. When possible, this event message should indicate what the nature of the fault is.
(ii) Financial storage component full	Reported when a financial instrument acceptor or dispenser includes storage, and it becomes full. This event message must indicate what financial storage component is full.
(iii) Financial output component empty	Reported when a financial instrument dispenser is empty. The event message must indicate which financial output component is affected, and whether it is empty.
(iv) Financial component fault	Reported when an occurrence on a financial component results in a known fault state.
(v) Critical memory error	Some critical memory error has occurred. When a non-correctable critical memory error has occurred, the data on the Class II gaming system component can no longer be considered reliable. Accordingly, any game play on the affected component must cease immediately, and an appropriate message must be displayed, if possible.
(vi) Progressive communication fault	If applicable; when communications with a progressive controller component is in a known fault state.
(vii) Program storage medium fault	The software has failed its own internal security check or the medium itself has some fault. Any game play on the affected component must cease immediately, and an

	appropriate message must be displayed, if possible.
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(2) The occurrence of any event identified in paragraph (a)(1) of this section must be recorded.

(3) Upon clearing any event identified in paragraph (a)(1) of this section, the Class II gaming system must:

- (i) Record that the fault condition has been cleared;
- (ii) Ensure the integrity of all related accounting data; and
- (iii) In the case of a malfunction, return a player's purchase or wager according to the rules of the game.

(b) Door open/close events.

(1) In addition to the requirements of paragraph (a)(1) of this section, the Class II gaming system must perform the following for any component affected by any sensed door open event:

- (i) Indicate that the state of a sensed door changes from closed to open or opened to closed;
- (ii) Disable all financial instrument acceptance, unless a test mode is entered;
- (iii) Disable game play on the affected player interface;
- (iv) Disable player inputs on the affected player interface, unless test mode is entered; and
- (v) Disable all financial instrument disbursement, unless a test mode is entered.

(2) The Class II gaming system may return the component to a ready to play state when all sensed doors are closed.

(c) Non-fault events. (1) The following non-fault events are to be acted upon as described below, if applicable:

Event	Definition
(i) Player interface off during play	Indicates power has been lost during game play. This condition must be reported by the affected component(s).
(ii) Player interface power on	Indicates the player interface has been turned on. This condition must be reported by the affected component(s).
(iii) Financial instrument storage component container/stacker removed	Indicates that a financial instrument storage container has been removed. The event message must indicate which storage container was removed.

§ 547.11 What are the minimum technical standards for money and credit handling?

(a) Credit acceptance, generally.

(1) Upon any credit acceptance, the Class II gaming system must register the correct number of credits on the player's credit balance.

(2) The Class II gaming system must reject financial instruments deemed invalid.

(b) Credit redemption, generally.

(1) For cashable credits on a player interface, players must be allowed to cash out and/or redeem those credits at the player interface except when that player interface is:

- (i) Involved in the play of a game;
- (ii) In audit mode, recall mode or any test mode;

(iii) Detecting any sensed door open condition;

(iv) Updating the player credit balance or total win accounting data; or

(v) Displaying a fault condition that would prevent cash-out or credit redemption. In this case a fault indication must be displayed.

(2) For cashable credits not on a player interface, the player must be allowed to cash out and/or redeem those credits at any time.

(3) A Class II gaming system must not automatically pay an award subject to mandatory tax reporting or withholding.

(4) Credit redemption by voucher or coupon must conform to the following:

(i) A Class II gaming system may redeem credits by issuing a voucher or coupon when it communicates with a voucher system that validates the voucher or coupon.

(ii) A Class II gaming system that redeems credits by issuing vouchers and coupons must either:

(A) Maintain an electronic record of all information required by paragraphs (b)(5)(ii) through (vi) of this section; or

(B) Generate two identical copies of each voucher or coupon issued, one to be provided to the player and the other to be retained within the electronic player interface for audit purposes.

(5) Valid vouchers and coupons from a voucher system must contain the following:

(i) Gaming operation name and location;

(ii) The identification number of the Class II gaming system component or the player interface number, as applicable;

(iii) Date and time of issuance;

(iv) Alpha and numeric dollar amount;

(v) A sequence number;

(vi) A validation number that:

(A) Is produced by a means specifically designed to prevent repetition of validation numbers;

and

(B) Has some form of checkcode or other form of information redundancy to prevent prediction of subsequent validation numbers without knowledge of the checkcode algorithm and parameters;

(vii) For machine-readable vouchers and coupons, a bar code or other form of machine readable representation of the validation number, which must have enough redundancy and error checking to ensure that 99.9% of all misreads are flagged as errors;

(viii) Transaction type or other method of differentiating voucher and coupon types; and

(ix) Expiration period or date.

(6) Transfers from an account may not exceed the balance of that account.

(7) For Class II gaming systems not using dollars and cents accounting and not having odd cents accounting, the Class II gaming system must reject any transfers from voucher payment systems or cashless systems that are not even multiples of the Class II gaming system denomination.

(8) Voucher redemption systems must include the ability to report redemptions per redemption location or user.

§ 547.12 What are the minimum technical standards for downloading on a Class II gaming system?

(a) Downloads.

(1) Downloads are an acceptable means of transporting approved content, including but not limited to software, files, data, and prize schedules.

(2) Downloads must use secure methodologies that will deliver the download data without alteration or modification, in accordance with § 547.15(a).

(3) Downloads conducted during operational periods must be performed in a manner that will not affect game play.

(4) Downloads must not affect the integrity of accounting data.

(5) The Class II gaming system must be capable of providing:

(i) The time and date of the initiation of the download;

(ii) The time and date of the completion of the download;

(iii) The Class II gaming system components to which software was downloaded;

(iv) The version(s) of download package and any software downloaded. Logging of the unique software signature will satisfy this requirement;

(v) The outcome of any software verification following the download (success or failure);
and

(vi) The name and identification number, or other unique identifier, of any individual(s) conducting or scheduling a download.

(b) Verifying downloads. Downloaded software on a Class II gaming system must be capable of being verified by the Class II gaming system using a software signature verification method that meets the requirements of § 547.8(f).

§ 547.13 What are the minimum technical standards for program storage media?

(a) Removable program storage media. All removable program storage media must maintain an internal checksum or signature of its contents. Verification of this checksum or signature is to be performed after every restart. If the verification fails, the affected Class II gaming system component(s) must lock up and enter a fault state.

(b) Nonrewritable program storage media.

(1) All EPROMs and Programmable Logic Devices that have erasure windows must be fitted with covers over their erasure windows.

(2) All unused areas of EPROMs must be written with the inverse of the erased state (zero bits (00 hex) for most EPROMs), random data, or repeats of the program data.

(3) Flash memory storage components intended to have the same logical function as ROM, must be write-protected or otherwise protected from unauthorized modification.

(4) The write cycle must be closed or finished for all CD-ROMs such that it is not possible to write any further data to the CD.

(5) Write protected hard disks are permitted if the hardware means of enabling the write protect is easily viewable and can be sealed in place. Write protected hard disks are permitted using software write protection verifiable by a testing laboratory.

(c) Writable and rewritable program storage media.

(1) Writable and rewritable program storage, such as hard disk drives, Flash memory, writable CD-ROMs, and writable DVDs, may be used provided that the software stored thereon may be verified using the mechanism provided pursuant to § 547.8(f).

(2) Program storage must be structured so there is a verifiable separation of fixed data (such as program, fixed parameters, DLLs) and variable data.

(d) Identification of program storage media. All program storage media that is not rewritable in circuit, (EPROM, CD-ROM) must be uniquely identified, displaying:

(1) Manufacturer;

(2) Program identifier;

(3) Program version number(s); and

(4) Location information, if critical (socket position 3 on the printed circuit board).

§ 547.14 What are the minimum technical standards for electronic random number generation?

(a) Properties. All RNGs must produce output having the following properties:

(1) Statistical randomness;

(2) Unpredictability; and

(3) Non-repeatability.

(b) Statistical Randomness.

(1) Numbers or other designations produced by an RNG must be statistically random individually and in the permutations and combinations used in the application under the rules of the game. For example, if a bingo game with 75 objects with numbers or other designations has a progressive winning pattern of the five numbers or other designations on the bottom of the card, and the winning of this prize is defined to be the five numbers or other designations that are

matched in the first five objects drawn, the likelihood of each of the 75C5 combinations are to be verified to be statistically equal.

(2) Numbers or other designations produced by an RNG must pass the statistical tests for randomness to a 99% confidence level.

(i) Mandatory statistical tests for randomness include:

(A) Chi-square test;

(B) Runs test (patterns of occurrences must not be recurrent); and

(C) Serial correlation test potency and degree of serial correlation (outcomes must be independent from the previous game).

(ii) Where applicable statistical tests for randomness may include:

(A) Equi-distribution (frequency) test;

(B) Gap test;

(C) Poker test;

(D) Coupon collector's test;

(E) Permutation test;

(F) Spectral test; or

(G) Test on subsequences.

(c) Unpredictability.

(1) It must not be feasible to predict future outputs of an RNG, even if the algorithm and the past sequence of outputs are known.

(2) Unpredictability must be ensured by reseeding or by continuously cycling the RNG, and by providing a sufficient number of RNG states for the applications supported.

(3) Re-seeding may be used where the re-seeding input is at least as statistically random as, and independent of, the output of the RNG being re-seeded.

(d) Non-repeatability. The RNG may not be initialized to reproduce the same output stream that it has produced before, nor may any two instances of an RNG produce the same stream as each other. This property must be ensured by initial seeding that comes from:

(1) A source of “true” randomness, such as a hardware random noise generator; or

(2) A combination of timestamps, parameters unique to a Class II gaming system, previous RNG outputs, or other, similar method.

(e) General requirements.

(1) Software that calls an RNG to derive game outcome events must immediately use the output returned in accordance with the game rules.

(2) The use of multiple RNGs is permitted as long as they operate in accordance with this section.

(3) RNG outputs must not be arbitrarily discarded or selected.

(4) Where a sequence of outputs is required, the whole of the sequence in the order generated must be used in accordance with the game rules.

(5) The Class II gaming system must neither adjust the RNG process or game outcomes based on the history of prizes obtained in previous games nor use any reflexive software or secondary decision that affects the results shown to the player or game outcome.

(f) Scaling algorithms and scaled numbers. An RNG that provides output scaled to given ranges must:

- (1) Be independent and uniform over the range;
- (2) Provide numbers scaled to the ranges required by game rules, and notwithstanding the requirements of paragraph (e)(3) of this section, may discard numbers that do not map uniformly onto the required range but must use the first number in sequence that does map correctly to the range;
- (3) Be capable of producing every possible outcome of a game according to its rules; and
- (4) Use an unbiased algorithm and any bias must be reported to the TGRA.

§ 547.15 What are the minimum technical standards for electronic data communications between system components?

(a) Sensitive data. Communication of sensitive data must be secure from eavesdropping, access, tampering, intrusion or alteration unauthorized by the TGRA. Sensitive data includes, but is not limited to:

- (1) RNG seeds and outcomes;
- (2) Encryption keys, where the implementation chosen requires transmission of keys;
- (3) PINs;
- (4) Passwords;
- (5) Financial instrument transactions;
- (6) Transfers of funds;
- (7) Player tracking information;

(8) Download Packages; and

(9) Any information that affects game outcome.

(b) Wireless communications.

(1) Wireless access points must not be accessible to the general public.

(2) Open or unsecured wireless communications are prohibited.

(3) Wireless communications must be secured using a methodology that makes eavesdropping, access, tampering, intrusion or alteration impractical. By way of illustration, such methodologies include encryption, frequency hopping, and code division multiplex access (as in cell phone technology).

(c) Methodologies must be used that will ensure the reliable transfer of data and provide a reasonable ability to detect and act upon any corruption of the data.

(d) Class II gaming systems must record detectable, unauthorized access or intrusion attempts.

(e) Remote communications must only be allowed if authorized by the TGRA. Class II gaming systems must have the ability to enable or disable remote access, and the default state must be set to disabled.

(f) Failure of data communications must not affect the integrity of critical memory.

(g) The Class II gaming system must log the establishment, loss, and re-establishment of data communications between sensitive Class II gaming system components.

§ 547.16 What are the minimum standards for game artwork, glass, and rules?

(a) Rules, instructions, and prize schedules, generally. The following must at all times be displayed or made readily available to the player upon request:

(1) Game name, rules, and options such as the purchase or wager amount stated clearly and unambiguously;

(2) Denomination;

(3) Instructions for play on, and use of, the player interface, including the functions of all buttons; and

(4) A prize schedule or other explanation, sufficient to allow a player to determine the correctness of all prizes awarded, including;

(i) The range and values obtainable for any variable prize;

(ii) Whether the value of a prize depends on the purchase or wager amount; and

(iii) The means of division of any pari-mutuel prizes; but

(iv) For Class II Gaming Systems, the prize schedule or other explanation need not state that subsets of winning patterns are not awarded as additional prizes (for example, five in a row does not also pay three in a row or four in a row), unless there are exceptions, which must be clearly stated.

(b) Disclaimers. The Player Interface must continually display:

(1) “Malfunctions void all prizes and plays” or equivalent; and

____(2) “Actual Prizes Determined by Bingo [or other applicable Class II game] Play. Other Displays for Entertainment Only” or equivalent.

(c) Odds notification. If the odds of winning any advertised top prize exceeds 100 million to

one, the Player Interface must display “Odds of winning the advertised top prize exceeds 100 million to one” or equivalent.

§ 547.17 How does a TGRA apply to implement an alternate standard to those required by this part?

(a) TGRA approval.

(1) A TGRA may approve an alternate standard from those required by this part if it has determined that the alternate standard will achieve a level of security and integrity sufficient to accomplish the purpose of the standard it is to replace.

(2) For each enumerated standard for which the TGRA approves an alternate standard, it must submit to the Chair within 30 days, a detailed report, which must include the following:

(i) An explanation of how the alternate standard achieves a level of security and integrity sufficient to accomplish the purpose of the standard it is to replace; and

(ii) The alternate standard as approved and the record on which the approval is based.

(3) In the event that the TGRA or the tribe’s government chooses to submit an alternate standard request directly to the Chair for joint government to government review, the TGRA or tribal government may do so without the approval requirement set forth in paragraph (a) (1) of this section.

(b) Chair Review.

(1) The Chair may approve or object to an alternate standard granted by a TGRA.

(2) Any objection by the Chair must be in written form with an explanation why the alternate standard as approved by the TGRA does not provide a level of security or integrity sufficient to

accomplish the purpose of the standard it is to replace.

(3) If the Chair fails to approve or object in writing within 60 days after the date of receipt of a complete submission, the alternate standard is considered approved by the Chair. The Chair may, upon notification to the TGRA, extend this deadline an additional 60 days.

(4) No alternate standard may be implemented until it has been approved by the TGRA pursuant to paragraph (a)(1) of this section or the Chair has approved pursuant to paragraph (b)(1) of this section.

(c) Appeal of Chair decision. A Chair's decision may be appealed pursuant to 25 CFR subchapter H.

Dated this _22_ of May, 2012

Tracie L. Stevens
Chairwoman

Steffani A. Cochran
Vice-Chairwoman

Daniel J. Little
Commissioner

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